

IN THE CLAIMS

1. (Currently Amended) A method comprising:

receiving a request to transition control to a virtual machine (VM) from a virtual machine monitor (VMM);

determining whether the VMM has requested a delivery of a fault to the VM; ~~and~~

if the VMM has requested the delivery of ~~[[a]]~~ the fault to the VM, delivering the fault to the VM when transitioning control to the VM; and

if the delivery of the fault to the VM is not successful, determining whether a new fault is to be delivered to the VM.
2. (Original) The method of claim 1 wherein the request to transition control to the VM is received via an instruction executed by the VMM.
3. (Original) The method of claim 1 wherein determining whether the VMM has requested the delivery of the fault to the VM comprises:

accessing a fault indicator maintained by the VMM; and

determining whether the fault indicator is set to a delivery value.
4. (Original) The method of claim 1 further comprising:

determining an identifier of the fault and a type of the fault; and

determining whether the fault is associated with an error code that is to be provided to a handler associated with the fault.
5. (Original) The method of claim 4 further comprising:

if the fault requires the delivery of the error code to the handler associated with the fault, retrieving the error code and providing the error code to the handler.

6. (Original) The method of claim 4 wherein:

the fault indicator, the fault identifier and the type of the fault are stored in a first field; and

the error code is stored in a second field.

7. (Original) The method of claim 6 wherein the first field and the second field are included in a virtual machine control structure (VMCS).

8. (Currently Amended) The method of claim 1 ~~further comprising~~ wherein
determining whether a new fault is to be delivered to the VM comprises:

~~determining that the delivery of the fault was not successful;~~

determining whether ~~[[a]]~~ the new fault requires a transition of control to the VMM; and

transitioning control to the VMM if the new fault requires the transition.

9. (Original) The method of claim 8 further comprising:

determining that the new fault does not require a transition of control to the VMM;
and

delivering the new fault to the VM.

10. (Currently Amended) ~~An apparatus~~ computer system comprising:

~~a virtual machine monitor (VMM);~~

a memory having a data structure controlled by the a virtual machine monitor
(VMM), the data structure storing a fault indicator; and
fault delivery logic to receive a request to transition control to a virtual machine
(VM) from the VMM, to determine whether the VMM has requested a delivery of a fault
to the VM using the fault indicator, ~~and~~ to deliver the fault to the VM when transitioning
control to the VM if the VMM has requested the delivery of the fault to the VM, and if the
delivery of the fault to the VM is not successful, to determine whether a new fault is to be
delivered to the VM.

11. (Original) The apparatus of claim 10 wherein the request to transition control to the
VM is received via an instruction executed by the VMM.

12. (Original) The apparatus of claim 10 wherein the fault delivery logic is to
determine whether the VMM has requested the delivery of the fault to the VM by
accessing the fault indicator maintained by the VMM, and determining whether the fault
indicator is set to a delivery value.

13. (Original) The apparatus of claim 10 wherein the fault delivery logic is further to
determine an identifier of the fault and a type of the fault, and to determine whether the
fault is associated with an error code that is to be provided to a handler associated with the
fault.

14. (Original) The apparatus of claim 13 wherein the fault delivery logic is further to

retrieve the error code and provide the error code to the handler if the fault requires the delivery of the error code to the handler associated with the fault.

15. (Original) The apparatus of claim 13 wherein:

the fault indicator, the fault identifier and the type of the fault are stored in a first field; and

the error code is stored in a second field.

16. (Original) The apparatus of claim 15 wherein the first field and the second field are included in a virtual machine control structure (VMCS).

17. (Currently Amended) The apparatus of claim 10 wherein the fault delivery logic is ~~further to determine that the delivery of the fault was not successful, whether a new fault is~~ to be delivered to the VM by to determine determining whether a the new fault requires a transition of control to the VMM, and ~~to transitioning~~ transitioning control to the VMM if the new fault requires the transition.

18. (Original) The apparatus of claim 17 wherein the fault delivery logic is further to determine that the new fault does not require a transition of control to the VMM, and to deliver the new fault to the VM.

19. (Currently Amended) A system comprising:

a memory to store guest software; and

a processor, coupled to the memory, to receive a request to transition control to the

guest software from a virtual machine monitor (VMM), to determine that the VMM has requested a delivery of a fault to the guest software, ~~and~~ to deliver the fault to the guest software when transitioning control to the guest software, and if the delivery of the fault to the VM is not successful, to determine whether a new fault is to be delivered to the VM.

20. (Original) The system of claim 19 wherein the processor is further to determine whether the VMM has requested the delivery of the fault to the VM by accessing a fault indicator maintained by the VMM, and determining whether the fault indicator is set to a delivery value.

21. (Original) The system of claim 19 wherein the processor is further to determine an identifier of the fault and a type of the fault, and to determine whether the fault is associated with an error code that is to be provided to a handler associated with the fault.

22. (Original) The system of claim 21 wherein the processor is further to retrieve the error code and provide the error code to the handler if the fault requires the delivery of the error code to the handler associated with the fault.

23. (Currently Amended) An article of manufacture comprising:
a machine-readable storage medium containing instructions which, when executed by a processing system, cause the processing system to perform a method, the method comprising:

receiving a request to transition control to a virtual machine (VM) from a virtual machine monitor (VMM);

determining whether the VMM has requested a delivery of a fault to the VM; ~~and~~
if the VMM has requested the delivery of ~~a~~ the fault to the VM, delivering the fault
to the VM when transitioning control to the VM; and
if the delivery of the fault to the VM is not successful, determining whether a new
fault is to be delivered to the VM.

24. (Original) The machine-readable medium of claim 23 wherein the request to
transition control to the VM is received via an instruction executed by the VMM.

25. (Original) The machine-readable medium of claim 23 wherein determining
whether the VMM has requested the delivery of the fault to the VM comprises:

accessing a fault indicator maintained by the VMM; and

determining whether the fault indicator is set to a delivery value.

26. (Original) The machine-readable medium of claim 23 wherein the method further
comprises:

determining an identifier of the fault and a type of the fault; and

determining whether the fault is associated with an error code that is to be provided
to a handler associated with the fault.